

## WHAT IS CLAIMED IS:

1. An image processing method utilizing computer graphics in which an image at a higher drawing level is formed from a computer graphics image formed by computer graphics, said method comprising the steps of:

selecting a particular drawing level from a plurality of drawing levels set in advance for a computer graphics algorithm based on at least one of an amount of computation processing, an amount of data and a display resolution;

executing a process of forming the computer graphics image by said computer graphics algorithm at the thus selected particular drawing level; and

performing processing by said computer graphics algorithm at a higher drawing level than said particular drawing level which was selected from said plurality of drawing levels based on editing data in the process of forming said computer graphics image at said particular drawing level or based on said editing data and attached data thereby forming image data at said higher drawing level.

2. The image processing method according to claim 1, wherein said image at the higher drawing level is an

image to be printed or an image to be displayed, and said image data at the higher drawing level is print image data or display image data.

3. The image processing method according to claim 1, wherein said image at the higher drawing level is an output image, said image data at the higher drawing level is output image data, and said processing by said computer graphics algorithm at the higher drawing level is performed in a process of outputting.

4. The image processing method according to claim 1, wherein when said computer graphics image is formed, said particular drawing level is selected from said plurality of drawing levels for each image component in an imaged scene or for each processing operation performed for producing a specified particular effect on said computer graphics image.

5. The image processing method according to claim 1, wherein a plurality of computer graphics algorithms are further prepared, and a particular algorithm is selected from said plurality of computer graphics algorithms based on at least one of said amount of computation processing,

said amount of data and said display resolution, and for the thus selected particular algorithm, said particular drawing level is selected from said plurality of drawing levels.

6. The image processing method according to claim 5, wherein when said computer graphics image is formed, said particular algorithm is selected from said plurality of computer graphics algorithms for each image component in an imaged scene or for each processing operation performed for producing a specified particular effect on said computer graphics image.

7. The image processing method according to claim 1, wherein the process of forming the computer graphics image at the particular drawing level is performed in a first image processor, whereas the processing by said computer graphics algorithm at the higher drawing level is performed with a different timing in a second image processor different from said first image processor.

8. The image processing method according to claim 7, wherein said first image processor is a personal computer and said second image processor is a host computer

connected to the personal computer through a communication network.

9. The image processing method according to claim 1, wherein the process of forming the computer graphics image at the particular drawing level is performed in an image processor and the processing by said computer graphics algorithm at the higher drawing level is performed in the same image processor.

10. The image processing method according to claim 9, wherein said image processor is a personal computer.

11. The image processing method according to claim 1, wherein processing operations at different drawing levels including the process of forming the computer graphics image at the particular drawing level and the processing by said computer graphics algorithm at the higher drawing level are performed by sharing among a plurality of image processors interconnected through a communication network.

12. The image processing method according to claim 11, wherein said plurality of image processors are personal

computers.

13. The image processing method according to claim 11, wherein an image processor to be selected from said plurality of image processors for performing a processing operation at each of said different drawing levels and a timing applied for performing said processing operation are set in advance to said editing data or as a processing condition.

14. An image processing system utilizing computer graphics comprising:

a host computer; and

an image processor which is connected to the host computer through a communication network and forms a computer graphics image for forming an output image in said host computer, said image processor including:

a selecting section for selecting for a computer graphics software a particular algorithm and a particular drawing level from a plurality of algorithms and a plurality of drawing levels set in advance in said host computer based on at least one of an amount of computation processing, an amount of data and a display resolution;

a download section for downloading the computer

graphics software corresponding to the thus selected particular algorithm and drawing level from said host computer; and

an image forming section for forming said computer graphics image by using the thus downloaded computer graphics software;

wherein image editing data in a process of forming said computer graphics image or said image editing data and data attached thereto are transmitted to said host computer through said communication network.

15. An image processing system utilizing computer graphics comprising:

an image processor; and

a host computer which forms an output image based on a computer graphics image formed in said image processor connected to said host computer through a communication network;

said host computer including:

a selecting section for selecting a computer graphics software at a higher drawing level than in a computer graphics software used by said image processor to form said computer graphics image; and

a section for forming said output image by the

selected computer graphics software at the higher drawing level by using image editing data when said computer graphics image was formed in said image processor or the image editing data and data attached thereto, which have been received from said image processor through said communication network;

wherein the output image is output as a print, recorded on a predetermined recording medium, or transmitted through said communication network.

16. An image processing system utilizing computer graphics comprising:

a first image processor for forming a computer graphics image; and

a second image processor for forming an output image based on said computer graphics image formed in said first image processor;

wherein said first image processor includes:

a selecting section for selecting for a computer graphics software a particular algorithm and a particular drawing level from a plurality of algorithms and a plurality of drawing levels set in advance in said second image processor based on at least one of an amount of computation processing, an amount of data and a display

resolution; and

a computer graphics image forming section for forming the computer graphics image by using the computer graphics software corresponding to the thus selected particular algorithm and drawing level, whereas said second image processor includes:

a selecting section for selecting a computer graphics software at a higher drawing level than in said computer graphics software used in said first image processor to form said computer graphics image; and

a section for forming said output image by the thus selected computer graphics software at the higher drawing level by using image editing data when said computer graphics image was formed in said first image processor or the image editing data and data attached thereto; and

wherein the output image is output as a print, recorded on a predetermined recording medium, or transmitted through a communication network.

17. The image processing system according to claim 16, wherein said first image processor is connected to said second image processor through the communication network;

wherein said first image processor further includes a



download section for downloading the selected computer graphics software from said second image processor;

wherein the computer graphics image forming section forms said computer graphics image by using said computer graphics software downloaded by said download section;

wherein the image editing data when said computer graphics image was formed or the image editing data and the data attached thereto are transmitted to said second image processor through said communication network; and

wherein said second image processor receives said image editing data when said computer graphics image was formed or the image editing data and the data attached thereto from said first image processor through said communication network.

18. The image processing system according to claim 17, wherein said second image processor is a host computer connected to said first image processor through said communication network.

19. The image processing system according to claim 16, wherein one image processor functions as said first image processor and said second image processor.

20. The image processing system according to claim 16, wherein said first image processor is a personal computer.

21. The image processing system according to claim 16,

wherein said first image processor and said second image processor include a plurality of personal computers which execute said computer graphics software in different algorithms included in said plurality of algorithms and at different drawing levels included in said plurality of drawing levels;

wherein the plurality of personal computers are interconnected by the communication network, and

wherein said computer graphics software is shared for said different algorithms and said different drawing levels among said plurality of personal computers and executed.

22. The image processing system according to claim 21, wherein a personal computer to be selected from the plurality of personal computers for executing said computer graphics software in each of said different algorithms and at each of said different drawing levels, and a timing applied for executing said computer graphics software are

set in advance to said editing data or as a processing condition.

23. An image processing method comprising the steps of:

reading a hand-drawn image;

extracting from the thus read hand-drawn image a figure having a shape registered in advance; and

substituting an image registered in advance and corresponding to the thus extracted figure for the extracted figure in the read hand-drawn image thereby forming an output image.

24. The image processing method according to claim 23, wherein the image registered in advance is a computer graphics image or a photographic image.

25. An image processing method having at least one mode corresponding to a figure having a shape registered in advance which is selected from:

a mode in which a complete computer graphics image is registered in advance;

a mode in which computer graphics forming algorithms and setting parameter editing data are registered in

advance; and

a mode in which said complete image and said editing data are selectively registered, said method comprising the steps of:

reading a hand-drawn image;

extracting from the thus read hand-drawn image the figure having the shape registered in advance; and

forming an output image by substituting for the extracted figure the complete image registered in advance and corresponding to the extracted figure, or by forming a computer graphics image by using said editing data registered in advance and corresponding to the extracted figure and by substituting the formed computer graphics image for the extracted figure according to one of said modes.

26. The image processing method according to claim 25, wherein switching between the mode for registering the complete image and the mode for registering the editing data is performed according to a frequency of use of a registered image, or a composition or an image quality of the output image.